UNIVERSITY OF PENNSYLVANIA - SCHOOL OF MEDICINE

Curriculum Vitae

July 2002

John Timothy Farrar, M.D., M.S.C.E.

Home Addres	<u>ss:</u>	
Office Addres	<u>ss</u> :	Room 816, Blockley Hall 423 Guardian Drive Philadelphia, PA 19104-6021
Education:	1976 1981 2000	ScB. Brown University (Biology, Computer Science minor) M.D. The University of Rochester School of Medicine M.S.C.E. The University of Pennsylvania, Center for Clinical Epidemiology and Biostatistics
Postgraduate		Fellowship Appointments: Molecular Biology, The Cold Spring Harbor Laboratory, Cold Spring
	1978 - 1979	Harbor, NY
	1981 - 1983	Residency Program in Internal Medicine, Children's Hospital of San Francisco, CA
	1984 - 1986	Residency Program in Neurology, The New York Hospital, Cornell Medical Center, New York, NY
	1986 - 1987	Chief Resident in Neurology, The New York Hospital, Cornell Medical Center, New York, NY
	1987 - 1988	Neuro-Oncology and Pain Fellow, Department of Neurology, Memorial Sloan Kettering Cancer Center, New York, NY
	1993 - 2000	Fellowship in Clinical Epidemiology and Biostatistics, Center for Clinical Epidemiology and Biostatistics University of Pennsylvania, Philadelphia, PA

None

Military Service:

Faculty Appointments:	Facu	ltv A	odd	intm	ents:
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1991 - 1993	Lecturer, Department of Neurology, University of Pennsylvania, Philadelphia, PA
1993 - 1997	Assistant Professor Department of Neurology

1993 - 1997 Assistant Professor, Department of Neurology, University of Pennsylvania, Philadelphia, PA

1997 - Adjunct Assistant Professor of Epidemiology, Department of Biostatistics and Epidemiology University of Pennsylvania, Philadelphia, PA

1997 - Adjunct Assistant Professor of Anesthesia,
Department of Anesthesia, University of Pennsylvania
Philadelphia, PA

1997 - Clinical Associate, Department of Neurology University of Pennsylvania, Philadelphia, PA

1997 - Senior Scholar, Center for Clinical Epidemiology and Biostatistics University of Pennsylvania, Philadelphia, PA

Hospital and Administrative Appointments:

1983 - 1984	Co-Director, Family Practice and Tropical Medicine,
	Panguma Hospital, Sierra Leone, West Africa
1988 - 1989	Consultant on Health Issues, New Delhi, India
1989 - 1991	Project Development Coordinator, United States Agency for
	International Development, New Delhi, India
1991 - 1994	Deputy Executive Director, International Clinical Epidemiology
	Network, Philadelphia, PA
1991-	Attending Staff, Department of Neurology,
	Hospital of the University of Pennsylvania, Philadelphia, PA
1993 -	Chairman, Subcommittee on the Management of Pain
1992 -	Member, Drug Use and Effects Subcommittee
1995 -	Vice-Chairman, Drug Use and Effects Subcommittee

Specialty Certification:

1995 American Board of Psychiatry and Neurology, Inc.

Licensure: Pennsylvania and New York

Awards, Honors and Membership in Honorary Societies:

1976	Magna Cum Laude, Biology, Brown University
1998	Recognition Award, Pennsylvania Society for Action on Pain,
	Washington, DC
1999	Certificate of Appreciation for Service to the Pennsylvania Cancer
	Pain Initiative Steering Committee

Membership in Professional and Scientific Societies:

National Societies:

The American Academy of Neurology (Member, 1984 -)

International Association for the Study of Pain (Member, 1987 -)

Indian Clinical Epidemiology Network (Governing Board Member, 1990 -)

American Pain Society (Member, 1992 -)

International Society for Pharmaco-Epidemiology (Member, 1992 -)

American Society for Clinical Pharmacology and Therapeutics (Member, 1992 -)

American College of Epidemiology (Member, 2002 -)

Local Societies:

Philadelphia Pain Society, (Member, 1992 -)

Pennsylvania Cancer Pain Initiative Steering Committee (Member, 1992 -)

University of Pennsylvania Cancer Center (Member, 1994 -)

Editorial Positions:

1995 - 1998 Expert Analyst, The Pain Medicine Journal Club Journal

1998 - pres Associate Editor, Pharmacoepidemiology and Drug Safety

Academic Committees at the University of Pennsylvania and Affiliated Hospitals:

1996 - pres Chairman, Subgroup on Clinical Trials - Cancer Pain and Symptom

Management Group - University of Pennsylvania Cancer Center

<u>Major Teaching and Clinical Responsibilities for the University of Pennsylvania and Affiliated Hospitals:</u>

- 1. Attending, Multidisciplinary Cancer Pain Clinic
- 2. Course Director, Epi 641 Advanced Epidemiology: Issues in Health Measurement and Analysis
- 3. Lecturer, Epi 154 Clinical Evaluative Sciences: Introduction to Clinical Epidemiology

Consultation and Extramural Activities:

1996 - 2000 Anesta, Corp., Board of Advisors

1997 - 2000 Parke-Davis, Board of Advisors

1997 - pres PA Cancer Pain Initiative, Steering Committee

1999 - pres Endo Pharmaceuticals, Board of Advisors

2000 - pres Faulding Pharmaceuticals

2000 - pres Pfizer, Neurology Advisory Board

2000 - pres Pfizer, Medical and Academic Partnership in Pain Management

Lectures by Invitation:

March 4, 1994 "Pain Mechanisms" - Medical College of Pennsylvania Hospital,

Philadelphia, PA

June 22, 1995 "Diabetic Neuropathy" - TV Show for Postgraduate Institute

for Medicine, Washington, DC

August 4, 1996	"Adjuvants: Antidepressants and Anticonvulsants" - American Society of Regional Anesthesia, Chicago, IL
August 4, 1996	"Interpretation of Electromyography and Evoked Potentials Studies" - American Society of Regional Anesthesia, Chicago, IL
October 17, 1996	"Use of Antiepileptic Drugs in the Treatment of Chronic Pain Syndromes" - Professional Postgraduate Services Study Group
October 24, 1996	Program, Pittsburgh, PA "Pain Management in the 90's" - Pain Management Committee, Marian Community Hospital, Carbondale, PA
November 16, 1996	"Perioperative Analgesia: Approaching the 21st Century" - American Pain Society Meeting, Washington, DC
May 9, 1997	"Pharmacological Management of Pain" - Albert Einstein Medical Center, Philadelphia, PA
July 19, 1997	"Adjuvant Analgesics and Anesthetic/Neurosurgical Treatments for Cancer Pain" - Cancer Pain Role Model Conference, Sharon, PA
December 16, 1997	"Pain Management in the Terminally Ill Patient" - Ephrata Hospital Grand Rounds, Ephrata, PA
January 16, 1998	"Therapeutic Use of Non-Opioid Analgesics" - 2 nd Conference on Pain Management and Chemical Dependency: Evolving Connections, New York, NY
June 3, 1998	"Pain and Symptom Management of Cancer Pain" - Easton Hospital Cancer Center, Easton, PA
September 22, 1998	"Barriers to Effective Pain Management" - Doylestown Hospital, Doylestown, PA
January 16, 1999	"Pain and Sleep: Clinical Interactions and Implications for Treatment", Emory University School of Medicine, Atlanta, GA
January 29, 1999	"Therapeutic Use of Non-Opioid Analgesics" - 3 rd Conference on Pain Management and Chemical Dependency: Evolving Connections, New York, NY
February 16, 1999	"Cancer Pain" - Medical Answers, TV Broadcast Series, Washington, DC
April 18, 1999	"Therapeutic Use of Adjuvant Analgesics: Antidepressants, Anticonvulsants, and Miscellaneous Agents" - American Academy of Neurology Annual Meeting, Toronto, Canada
May 16, 1999	"Managing Difficult Cancer Pain Problems" - 35 th ASCO Annual Meeting, Atlanta, GA
June 4, 1999	"Ethical Issues in Analgesic Clinical Trials", 2 nd International Conference on Mechanisms and Treatment of Neuropathic Pain, Washington, DC
September 23, 1999	"Use of Adjuvant Pain Medications", Contemporary Concepts in Cancer Pain Management, Harrisburg, PA
November 12, 1999	"Expanding Role of Adjuvant Analgesics", 3 rd International Comprehensive Cancer Care Conference, New York, NY
December 7, 1999	"Pharmacological Management of Non-Cancer Pain", St. Mary's Medical Center, Langhorne, PA

April 15, 2000	"Neuropathic Pain: Physiologic Basis for Diagnosis and Therapy", Institute for Continuing Health Care Education,
	Toronto, Canada
May 5, 2000	"Chronic Neuropathic Pain: Pathogenesis, Diagnosis and
June 10, 2000	Treatment", American Academy of Neurology, San Diego, CA "Design and Analysis of Clinical Trials: What is Clinically Meaningful?", Third International Conference on the Mechanisms
July 15, 2000	and Treatment of Neuropathic Pain, Washington, DC "Effectively Measuring Pain Relief: Translating Pain Scales to Clinical Improvements", Neurobiology Working Group Meeting,
August 10, 2000	Stockholm, Sweden "Focused Neurologic Exam: Part I and II", The American Society of Regional Anesthesia & Pain Medicine, Key West, FL
November 3, 2000	"Novel Approaches to the Understanding and Treatment of Neuropathic Pain", American Pain Society, Atlanta, GA
January 17, 2001	"Opioid use in non-malignant pain management", Jacksonville, FL
April 19, 2001	"Evidence Based Medicine: The Meaning of Measures of Pain", American Pain Society Course, Phoenix, Az.
May 5, 2001	"Neuropathic Pain: Clinical Diagnosis and Therapy" (Breakfast Seminar), American Academy of Neurology Course, Philadelphia,
May 6, 2001	PA "Pain: Approachs to the Management of Neuropathic Pain" (Half-Day Course), American Academy of Neurology Course,
June 25, 2001	Philadelphia, PA "Novel Approaches to the Understanding and Treatment of Pain Associated with Diabetes", ADA Satellite Symposium,
January 11, 2002	Philadelphia, PA "Clinical Trials and Measurement of Pain", Allergan Advisory Panel Board Meeting, Newport Beach, CA
January 26, 2002	"Neuropathic Pain", Keppra Steering Committee Meeting, Washington, DC
March 15, 2002	"Management of Neuropathic Pain: Focus on Patient-Reported Outcomes", American Pain Society, Baltimore, MD
April 5, 2002	"Neuropathic Pain: Clinical Diagnosis and Therapy," PCPI Annual Conference, Harrisburg, PA
April 12, 2002	"The Evaluation of Acupuncture: Placebo Controlled Studies and Elucidation of Physiologic Pathways," Update in Rheumatology,
April 14, 2002	University of Pennsylvania School of Medicine, Philadelphia, PA "Chronic Neuropathic Pain," American Academy of Neurology Annual Meeting, Denver, CO
May 3, 2002	"Neuropathic Pain and Comorbid Conditions: The Role of the
May 18, 2002	New AED's," NYU School of Medicine, New York, NY "Diagnostic and Clinical Features of Painful Peripheral Neuropathies," Dannemiller Memorial Educational Foundation, Philadelphia, PA

June 29, 2002

"Pathophysiology of Neuropathic Pain," Dannemiller Memorial Educational Foundation, Pittsburgh, PA

Bibliography:

Research Publications, peer reviewed:

Liu, G.T., Volpe, N.J., Schatz, N.J., Galetta, S.L., <u>Farrar, J.T.</u>, Raps, E.C.: Severe sudden visual loss caused by pseudotumor cerebri and lumboperitoneal shunt failure. <u>American Journal of Ophthalmology</u>, 122(1):129-131, 1996.

Feldman, H.I., Kinman, J., Berlin, J.A., Hennessy, S., Kimmel, S.E., <u>Farrar, J.T.</u>, Carson, J.L., Strom, B.L.: Parenteral ketorolac: The risk of acute renal failure. <u>Annals of Internal Medicine</u>, 126(3):193-199, 1997.

Strom, B.L., Schinnar, R., Bilker, W.B. Feldman, H., <u>Farrar, J.T.</u>, Carson, J.L.: Gastrointestinal tract bleeding associated with naproxen sodium vs ibuprofen. <u>Archives of Internal Medicine</u>, 157(22):2626-2631, 1997.

Hennessy, S., Kinman, J.L., Berlin, J.A., Feldman, H.I., Carson, J.L., Kimmel, S.E., <u>Farrar, J.T.</u>, Harb, G., Strom, B.L.: Lack of hepatotoxic effects of parenteral ketorolac in the hospital setting. <u>Archives of Internal Medicine</u>, 157:(21)2510-2514, 1997.

Farrar, J.T., Cleary, J., Rauck, R., Busch, M., Nordbrock, E.: Oral transmucosal fentanyl citrate: Randomized, double-blinded, placebo-controlled trial for treatment of breakthrough pain in cancer patients. <u>Journal of the National Cancer Institute</u>, 90(8):611-616, 1998.

Litwin, M.S., McNaughton-Collins, M., Fowler, F.J., Jr., Nickel, J.C., Calhoun, E.A., Pontari, M.A., Alexander, R.B., <u>Farrar, J.T.</u>, O'Leary, M.P.: The National Institutes of Health Chronic Prostatitis Symptom Index: Development and validation of a new outcome measure. <u>Journal of Urology</u>, 162(2):369-375, 1999.

Meng, Q.C., Cepeda, M.S., Kramer, T., Zou, H., Matoka, D.J. <u>Farrar, J.</u>: High-performance liquid chromatographic determination of morphine and its 3- and 6-glucuronide metabolites by two-step solid-phase extraction. <u>Journal of Chromatography B, Biomedical Sciences & Applications</u>, 742:115-123, 2000.

Farrar, J.T., Portenoy, R.K., Berlin, J.A., Kinman, J.L., Strom, B.L.: Defining the clinically important difference in pain outcome measures. <u>Pain</u>, 88(3):287-294, 2000.

Farrar, J.T., Young, Jr., J.P., LaMorequx, L., Werth, J.L., Poole, R.M.: Clinical importance of changes in chronic pain intensity measured on an 11-point numerical pain rating scale. <u>Pain</u>, 94(2):149-158, 2001.

Cepeda, M.S., <u>Farrar</u>, <u>J.T.</u>, Roa, J.H., Boston, R., Meng, Q.C., Ruiz, F., Carr, D.B., Strom, B.L.: Ethnicity influences morphine pharmacokinetics and

- pharmacodynamics. <u>Journal of Clinical Pharmacology and Therapeutics</u>, 70(4):351-361, 2001.
- Dlugos, D.J., Sammel, M.D., Strom, B.L., <u>Farrar, J.T.</u>: Response to first drug trial predicts outcome in childhood temporal lobe epilepsy. <u>Neurology</u>, 57:2259-2264, 2001.
- Casarett, D., Hirschman, K.B., Miller, E., <u>Farrar, J.T.</u>: Is satisfaction with pain management a valid and reliable quality indicator for use in nursing homes?, <u>Journal of the American Geriatrics Society</u>, In Press, 2002.
- Farrar, J.T., Berlin, J.A., Strom, B.L.: Clinically important changes in acute pain outcome measures: A validation study. <u>Journal of Pain and Symptom Management</u>, Submitted, 2002.
- Farrar, J.T, Halpern, S.D., Berlin, J.A., Strom, B.L.: The choice of the measurement scale and summary efficacy measure substantially effect the results of clinical trials of pain therapies. <u>The Clinical Journal of Pain</u>, Submitted, 2002.
- Cepeda, M.S., Boston, R., <u>Farrar, J.T.</u>, Strom, B.L.: Optimal matching with a variable number of controls vs. a fixed number of controls for a cohort study: Trade-offs. <u>Journal of Clinical Epidemiology</u>, Submitted, 2002.
- Farrar, J.T., Berlin, J.A., Strom, B.L.: The importance of incorporating baseline pain values into the analysis of clinically relevant pain intensity differences. <u>Pain</u>, Submitted, 2002.
- Cepeda, M.S., <u>Farrar</u>, <u>J.T.</u>, Boston, R., Strom, B.L.: Effect of type of opioid, age, gender, and race on opioid induced side effects. In Preparation, 2002.
- Cepeda, M.S., Boston, R., <u>Farrar, J.T.</u>, Strom, B.L.: Logistic regression versus propensity score when the number of events is low and there are multiple confounders. In Preparation, 2002.
- Farrar, J.T., Berlin, J.A., Strom, B.L.: The medications used to treat pain in cancer patients in the UK: An analysis of the GPRD database. In preparation, 2002.
- Farrar, J.T., Berlin, J.A., Strom, B.L.: The analgesic medications used to treat pain in US cancer patients: An analysis of the Illinois Medicaid Database. In preparation, 2002.
- Farrar, J.T., Berlin, J.A., Strom, B.L.: Applying Clinically Important Difference to Pain Outcome Measures: The Risks and Benefits of a Dichotomous Outcome. In preparation, 2002.

Contributions to peer-reviewed clinical research publications, participation cited but not by authorship: None

Research Publications, non-peer reviewed: None

Abstracts:

Haplea, S., <u>Farrar, J.T.</u>, Gibson, G.A., Laskin, M., Pizzi, L.T., Asbury, A.K.: Thromboembolic Events Associated with Intravenous Immunoglobulin Therapy. <u>Neurology</u>, 48(3):A54, 1997.

Farrar, J, Portenoy, R, Busch, M, Nordbrock, E: Randomized, Double-Blind, Placebo-Controlled Trials for New Analgesics Design Considerations. J. Pain and Symptom Management, 15:S16, 1998. Presented at 1st International Conference on Research in Palliative Care: Methodologies & Outcomes, Bethesda, MD, 1998.

Cepeda, M.S., <u>Farrar, J.T.</u>, Roa, J.H., Boston, R., Ming, Q.C., Ruiz, F., Carr, D.B., Strom, B.: Ethnicity Influences Opioid Pharmacokinetics and Pharmacodynamics. 9th World Congress on Pain, IASP Press, Vienna, Austria, 1999.

Farrar, J.T., DuPen, S.L., Lyss, A.P., Rauck, R., Laatkin, N., Gay, M.: Clinically Important Pain Relief: Oral Transmucousal Fentanyl Citrate (OTFC) vs Immediate Relief Morphine (IRMS) for Breakthrough Cancer Pain, 36th Annual Meeting of the American Society of Clinical Oncology, New Orleans, La., May 2000. (Oral Presentation)

Farrar, J.T.: Defining a Clinically Important Difference in Pain Outcome Measures, 16th International Society for Pharmacoepidemiology (ISPE) Scientific Program, Barcelona, Spain, August 2000.

Editorials, Reviews, Chapters including participation in committee reports (print or other media):

Garrels, J.I, Farrar, J.T., Burwell, C.B. IV: The QUEST System for Computer-Analyzed Two-Dimensional Electrophoresis of Protein, in Two-Dimensional Gel Electrophoresis of Proteins: Methods and Applications, Eds. J.E. Celis, and R. Bravo, Academic Press, Inc., 1984.

Farrar, J.T.: Commentary on "The interpretation of pain relief and sensory changes following sympathetic blockade", by Dellemin, P.L., Fields, H.L., Allen, R.R., McKay, W.R., and Rowbotham, M.C., in <u>The Pain Medicine Journal Club Journal</u>, 1(3):121-125, 1995.

Farrar, J.T., Strom, B.L.: Drug utilization evaluation: Is big brother watching? <u>Journal</u> of General Internal Medicine, 10(9):530-31, 1995.

- Sekeres, M.A., <u>Farrar</u>, <u>J.T.</u>, Strom, B.L.: The J-curve interpreted: An alternative explanation of the results. Journal of General Internal Medicine, 11(6):379-380, 1996.
- Farrar, J.T.: Commentary on "Low-dose, short-term oral prednisone in the treatment of carpal tunnel syndrome", by Herskovitz, S., Berger, A.R., Lipton, R.B., in <u>The Pain Medicine Journal Club Journal</u>, 2(2):68-69, 1996.
- Farrar, J.T.: Commentary on "Lidocaine patch: Double-blind controlled study of a new treatment for post-herpetic neuralgia", by Rowbotham M.C., Davies, P.S., Verkempinck, C., Galer, B.S., in <u>The Pain Medicine Journal Club Journal</u>, 3(2):73-76, 1997.
- Farrar, J.T.: Commentary on "Central pain: Clinical and physiologic characteristics", by D. Bowsher, in <u>The Pain Medicine Journal Club Journal</u>, 4(3):91-94, 1998.
- Teener, J., <u>Farrar, J.T.</u>: Neuromuscular dysfunction and supportive care. In Bergen, A., Levy, M.H., Portenoy, R.K., Weissman, D.E. (Eds.) <u>Principles and Practice of Supportive Oncology</u>, J.B. Lippincott Co., pp 465-475, Philadelphia, 1998.
- Farrar, J.T.: Incident pain: Definition, diagnosis, and therapy, Educational Book, edited by Michael C. Perry, Alexandria, VA, American Society of Clinical Oncology, 402-405, 1999.
- Farrar, J.T.: Neuropathic pain: Definition, diagnosis, and therapy, Educational Book, edited by Michael C. Perry, Alexandria, VA, American Society of Clinical Oncology, 405-415, 1999.
- Farrar, J.T.: Use of anticonvulsants in the treatment of neuropathic pain, Teaching Monograph, Primary Psychiatry, September, S10:43, 1999.
- Farrar, J.T.: What is clinically meaningful? Outcome measures in pain clinical trials. The Clinical Journal of Pain (Suppl), 16(2):106, June, 2000.
- Farrar, J.T.: Treating neuropathic pain and the neuropathic pain patient, <u>Advanced Studies in Medicine</u>, 1(6):241-47, 2001.
- Dworkin, R.H., Nagasako, E.M., Hetzel, R.D., <u>Farrar, J.T.</u>: Assessment of pain and pain-related quality of life in clinical trials, in Handbook of Pain Assessment, 2nd Edition, Ed. D.C. Turk and R. Melzack, pp 659-92, 2001.
- Farrar, J.T.: Pain relief and opioids: benefits, concerns and prescribing issues, in The Royal Society of Medicine Press Limited, Ed. B. Nicholson, Round Table Series 55:1-54, 2001.
- Farrar, J.T., Portenoy, R.K.: Neuropathic cancer pain: The role of adjuvant analgesics (solicited paper). Oncology 15(11):1435-1445, 2001.

- Ravina, B., Siderowf, A., <u>Farrar, J.T.</u>, Hurtig, H.I.: Welding-related parkinsonism: Clinical features, treatment and pathophysiology (letter). <u>Neurology</u> 57(5):936-7, 2001.
- Farrar, J.T., Portenoy, R.K.: Neuropathic pain: Hard-to-Treat Problem Calls for Creative Thinking, Oncology Times, 23(10):49-53, 2001.
- Farrar, J.T.: Chronic neuropathic pain: Pathogenesis and Treatment, 53rd Annual American Academy of Neurology Meeting, Philadelphia, PA, 2BS.010, pp. 14-33, 2001.
- Farrar, J.T.: A 65-year-old woman has severe numbness and tingling in her feet and hands that she says is "driving her crazy", <u>Advanced Studies in Medicine</u>, 1(10):422-23, 2001.
- Quan, D., Teener, J., Farrar, J.T.: Neuromuscular dysfunction and palliative care. In Berger, A.M. Portenoy, R.K. Weissman, D.E. (Eds.) <u>Principles and Practice of Palliative Care and Supportive Oncology</u>, 2nd Edition. J.B. Lippincott Co., pp 544-554, Philadelphia, 2002.
- Farrar, J.T., Halpern, S.: Understanding clinical trials in pain research. In Bruera E, Portenoy RK. (Eds.) <u>Cancer Pain</u>. Cambridge University Press, In press, 2002.

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